

Notice of Allowability

Application No.

10/765,830

Examiner

Lana N. Le

Applicant(s)

FUKUDA ET AL.

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/03/06.
2. ☒ The allowed claim(s) is/are 3 and 5-10.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with applicant's representative, Bradley Lytle, on 10/13/06.

2. The application has been amended as follows:

- in claim 3, line 9, after "signal", delete "base" and add ----based---;
- in claim 8, line 8, delete --- a plurality of adders for adding together said received signal and said pseudo interference signal to cancel said radiated noise component in said received signal-----;
- in claim 8, line 19, after "adders", add ----during the transmission interruption period of the transmitting side-----.

3. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 3, the cited prior art disclose a radio communication terminal comprising:

a receiver connected to a receiving antenna; and an interference canceller for canceling a radiated noise component of electronic equipment from a received signal output from said receiver; wherein said interference canceller includes generating a pseudo interference signal; and an adder for adding together said received signal and said pseudo interference signal to cancel said radiated noise component in said

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received signal; and wherein said interference canceller includes: an amplifier for controlling the level of the radiated noise obtained therefrom; a phase shifter for controlling the phase of said radiated noise; and a control part for controlling the gain of said amplifier and the phase-shift amount of said phase shifter based on the output from said adder.

However, the cited prior art fail to disclose a band converting part connected to electronic equipment, for converting said radiated noise from said electronic equipment to the same band as that of the output received signal of said receiver; a radiated noise predictor for generating a pseudo interference signal based on the converted output of said band converting part; and the amplifier of the radiated noise predictor connected to the output of said band converting part; and a phase shifter connected in series to said amplifier.

Regarding independent claim 5, the cited prior art disclose a radio communication terminal comprising: a receiver connected to a receiving antenna; an interference canceller for canceling a radiated noise component of electronic equipment from a received signal output from said receiver; and wherein said interference canceller includes: a radiated noise predictor for generating a pseudo interference signal base on the radiated noise produced by said electronic equipment; and an adder for adding together said received signal and said pseudo interference signal to cancel said radiated noise component in said received signal; and a control part for controlling coefficients of said adaptive filter based on the output from said adder.

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However, the cited prior art fail to disclose storing a radiated noise component received by said receiver during a transmission interruption period of a transmitting side; and wherein said radiated noise predictor includes an adaptive filter for generating said pseudo interference signal by adaptively filtering the radiated noise component read out from said memory during the transmission interruption period or transmission period of the transmitting side.

Regarding independent claim 6, it was the objected claim rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding independent claim 7, it is allowable for the reason as set forth in applicant's remarks, filed 8/03/06, page 1, line 19 – page 2, line 19.

Regarding independent claim 8, it is allowable for the reason as set forth in applicant's remarks, filed 8/03/06, page 1, line 19 – page 2, line 19 based on the examiner's amendment above.

Regarding independent claim 10, it is allowable for the reason as set forth in applicant's remarks, filed 8/03/06, page 4, lines 10-24.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

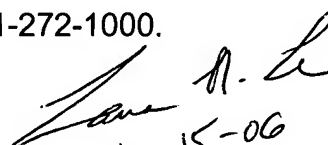
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lana N. Le whose telephone number is (571) 272-7891. The examiner can normally be reached on M-F 9:30-18:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lana Le


10-15-06
LANA LE
PRIMARY EXAMINER